

Abstract

The invention relates to a creep-proof and corrosion-resistant nickel-based alloy for the use in high-temperature technology, comprising in wt-%

0.0015 to 0.60 carbon (C)

0.20 to 0.90 nitrogen (N)

22.0 to 32.0 chromium (Cr)

5.0 to 20.0 elements of group 4, 5, and 6 of the periodic table, except Cr

0.03 to 3.0 aluminum (Al)

0.4 to 3.0 silicon (Si)

up to 0.15 elements of group 3 of the periodic table, except actinoids

up to 0.60 manganese (Mn)

up to 14.8 iron (Fe)

up to 0.01 boron (B)

a maximum of 0.014 phosphorus (P)

a maximum of 0.004 sulfur (S)

a minimum of 51 nickel (Ni) and/or cobalt (Co)

and melting-related impurities.